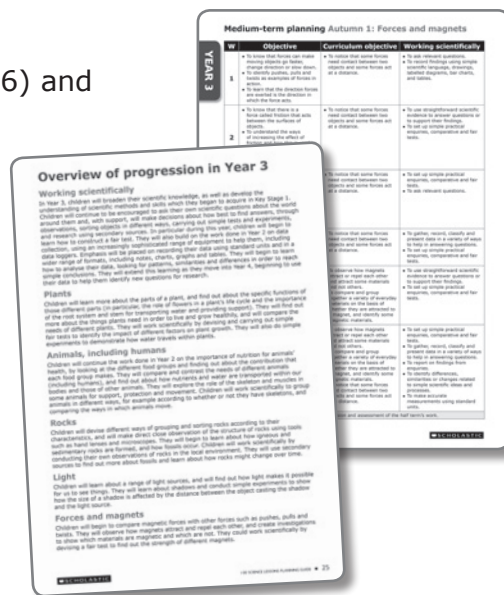


Contents	
Introduction	4
Year 1	
Long-term planning	6
Overview of progression	7
Medium-term planning	8
Background knowledge	14
Year 2	
Long-term planning	15
Overview of progression	16
Medium-term planning	17
Background knowledge	23
Year 3	
Long-term planning	24
Overview of progression	25
Medium-term planning	26
Background knowledge	32
Year 4	
Long-term planning	33
Overview of progression	34
Medium-term planning	35
Background knowledge	41
Year 5	
Long-term planning	42
Overview of progression	43
Medium-term planning	44
Background knowledge	50
Year 6	
Long-term planning	51
Overview of progression	52
Medium-term planning	53
Background knowledge	59
A summary of progression	60

About the book

The book provides content for each year group (Years 1–6) and includes:

- **Long-term planning:** The overview of the domains and what should be covered in that year. These are based upon the non-statutory guidance from the curriculum.
- **Progression:** This is a year-by-year overview of how the children progress through the domains. The progression overview includes what children should already know from the previous year, what is covered in the current year and how this progresses into the following year.
- **Medium-term planning:** Six half-termly grids are provided for each year group. Each contains an overview of each week's planning including the theme being covered, the outcomes for that week and the curriculum objectives covered. Please note that due to space some of the curriculum objectives have been abbreviated to fit, we recommend that you always refer to the full curriculum documentation in conjunction with the planning guide.
- **Background knowledge:** This explains key concepts relevant to the year group to help support teacher's knowledge with the more technical curriculum coverage of grammar.



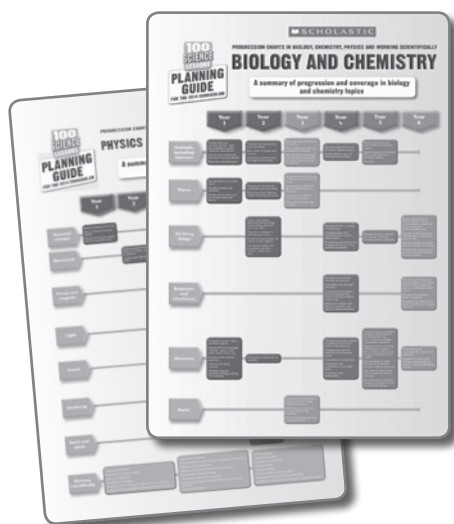
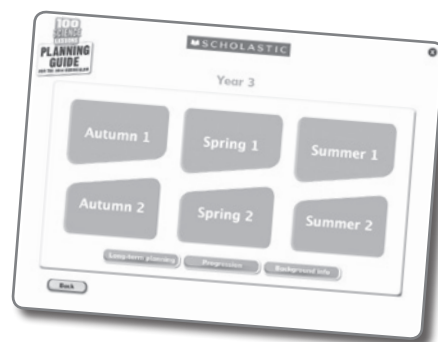
The final four pages of the book show a summary of progression and coverage for the six years through:

- biology
- chemistry
- physics
- working scientifically (although this should not be taught as a separate strand).

About the CD-ROM

The CD-ROM provides the long-term planning, progression, medium-term planning and background knowledge as editable Word files. These can be used and adapted to meet the needs of your school.

There is a simple menu screen on the CD-ROM, simply navigate to the year group you require and then click on the button to open the related file.



About the poster

The poster summarises some of the key features of progression for biology, chemistry, physics and working scientifically. Display it in a central location, such as the staffroom, to help improve knowledge of the new curriculum within your school.

Overview of progression in Year 2

Working scientifically

Children will build on the scientific methods and skills they began to learn in Year 1, as they continue to make observations of the world around them, and ask questions about what they observe. They will extend their use of simple scientific equipment, beginning to use measuring tools such as egg timers, tape measures and scales, and they will develop their data handling skills, recording data in various simple formats such as tables and lists. They will begin to think for themselves about the best way to find the answer to a scientific question, and they will become more experienced at sorting, grouping and classifying objects. This will provide children with a good foundation for the more detailed investigations, tests and data-collection which they will begin to take part in from Year 3.

Living things and their habitats

Children will begin to learn about the characteristics and life processes shared by all living things, and will think about the main differences between things that are alive, that are dead, and that have never been alive. They will show their ability to work scientifically by classifying things according to whether they are alive, dead or non-living. With help, they will learn how to explain their reasons for placing things in different categories. They will continue to build on this logical categorisation of objects in their work in Year 3. Children will begin to understand what is meant by 'habitat' and 'micro-habitat', and will study a range of different plants and animals in their local area. They will also be encouraged to compare animals in a range of habitats to see how living things depend on each other, learning about simple food chains as part of this work. They will demonstrate that they can work scientifically by recording their observations, comparing how different animals are suited to life in their habitats, and drawing and labelling a simple food chain.

Plants

Children will build on their observations and categorisation of different types and features of plants from Year 1. They will look at how plants grow, beginning with seeds and bulbs, and find out about the conditions plants need in order to grow and stay healthy. They will conduct simple comparative experiments and tests to demonstrate this, and will record their results with increasing accuracy. Children's findings in Year 2 will prepare them for a more detailed study of the conditions needed for plant growth, in Year 3.

Animals, including humans

Children will find out what humans and other animals need in order to grow and to survive. They will find out about animal life cycles, but with an emphasis on how animals grow and change as they age, rather than on reproduction. They will begin to learn about the important factors which help humans stay healthy, including exercise, a balanced diet, and hygiene. Children will work scientifically by observing animals and humans at first hand or using secondary sources, and by thinking of good questions about how animals grow and survive, and suggesting possible ways of finding out the answers to their questions.

Uses of everyday materials

Children will build on the work begun in Year 1, by learning about the different uses of specific materials such as metal, wood, plastic, glass etc. They will help to design tests and experiments to show some of the basic properties of different materials and how they can be used. They may also find out about scientists and inventors of new materials, and why their discoveries were so useful. They will work scientifically by observing, identifying and classifying the uses of different materials, both in and around the school and elsewhere in the world around them. They will continue to explore properties of materials in their work on Forces in Year 3.

Medium-term planning Spring 1: Plants

W	Outcomes	Curriculum objectives	Working scientifically
1	<ul style="list-style-type: none"> To revise the names of parts of plants including flowers, stems and roots. To introduce the idea that plants grow and change. To understand what the parts of flowers look like. To understand the differences and similarities between plants and animals. 	<ul style="list-style-type: none"> To observe and describe how seeds and bulbs grow into mature plants. To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> To observe closely. To identify and classify. To use their observations and ideas to suggest answers to questions.
2	<ul style="list-style-type: none"> To understand the importance of pollination. To understand the process of pollination. To begin to understand the wide variety of plants that grow in a small area. 	<ul style="list-style-type: none"> To observe and describe how seeds and bulbs grow into mature plants. 	<ul style="list-style-type: none"> To observe closely. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.
3	<ul style="list-style-type: none"> To understand that plants are important sources of food. To consider what foods animals and birds eat. To consider the requirements for plant growth. 	<ul style="list-style-type: none"> To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.
4	<ul style="list-style-type: none"> To understand that plants need water to grow and stay healthy. To understand that plants need warmth to grow. To understand that seeds do not need light to grow, but plants do. 	<ul style="list-style-type: none"> To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> To perform simple tests. To gather and record data to help in answering questions.
5	<ul style="list-style-type: none"> To consider the differences between seeds. To learn how potatoes, pineapples and onions begin to grow. To observe how plants 'drink'. 	<ul style="list-style-type: none"> To observe and describe how seeds and bulbs grow into mature plants. To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> To perform simple tests. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.
6	<ul style="list-style-type: none"> To know some of the differences between deciduous and evergreen bushes and trees. To know that plants have a variety of leaf shapes. To understand the different ways that plants protect themselves. 	<ul style="list-style-type: none"> To observe and describe how seeds and bulbs grow into mature plants. To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.
Assess and review		<ul style="list-style-type: none"> Revision and assessment of the half term's work. 	